We have made great advances in understanding how the brain processes pain, yet the treatment of pain, especially of chronic pain, remains one of the enduring challenges of medicine. We will discuss how opioids and alternative medications/therapies are designed to inhibit chronic pain without unwanted side effects, including addiction.

**Todd Vanderah, PhD**
Professor and Head of Pharmacology
Joint Appointments in Anesthesiology and Neurology, UA College of Medicine – Tucson
Research in chronic pain and addiction

---

Our emotional brain is in a constant conversation with the organs of our body. This often happens without our conscious awareness. This lecture will show how emotional pain and social stress contribute to the onset and severity of diseases and how tending to the emotional brain can alleviate both mental and physical illness.

**Katalin M. Gothard, MD, PhD**
Professor, Physiology
UA College of Medicine – Tucson
Joint Appointments in Neuroscience and Neurology
Center of Translational Social Neuroscience at Emory University
Research in emotion and social behavior

---

Autism now is a common condition and we are learning more about the genetics and brain differences associated with autism. This talk will discuss the concept of “autisms” versus autism and how brain differences and genetics play a role.

**Sydney Rice, MD, MSc**
Chief, Division of Genetics and Developmental Pediatrics, and Associate Professor of Pediatrics, UA College of Medicine – Tucson
Developmental Pediatrician, Banner – University Medical Center
Research in brain development

---

Questions from the Audience: Panel Discussion